



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,423	05/24/2001	Yaron Haviv	P-3150-US	9403
7590			EXAMINER	
11/29/2005			HA, LEYNNA A	
Eitan Law Group C/O LandonIP, Inc. Suite 450 1700 Diagonal Road Alexandria, VA 22314			ART UNIT	PAPER NUMBER
			2135	
DATE MAILED: 11/29/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/863,423	Applicant(s) HAVIV ET AL.	
	Examiner LEYNNA T. HA	Art Unit 2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/8/02 & 9/3/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20 have been re-examined and are pending.
2. This is a Final rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. **Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.**

Claims 1, 8, 15, and 18 discloses new subject matter “the communication interface bypasses a substantial portion of the operating system kernel” and “by passing a substantial portion of the operating system kernel” wherein neither of the limitations were originally introduced in the claimed invention nor the specification. The closest to the specification referencing any details would be the discussions of the operating system kernel on pages 14-15. However, fails to imply or explain the limitations of “the

communication interface bypasses a substantial portion of the operating system kernel” and “by passing a substantial portion of the operating system kernel”.

All dependent claims are also rejected due to their dependencies.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-5, 8-12, 15, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Rothermel, et al. (US 6,678,827).

Applicant is noted that the new matter limitations of “the communication interface bypasses a substantial portion of the operating system kernel” and “by passing a substantial portion of the operating system kernel” have not been entered for consideration.

As per claim 1:

Rothermel, et al. discloses a method for filtered application-to-application communication of applications running on computing platforms including an operating system kernel, said method comprising:

providing a communication interface to an application; **[COL.11, lines 18-19 and lines 67]**

filtering application data received from a process of said application according to a predetermined policy; and **[COL.4, lines 45-46 and COL.11, lines 56-64]**

providing said filtered application data directly to communication hardware. **[COL.12, lines 14-67]**

As per claim 2:

See COL.13, lines 46-67 and COL.15, lines 32-56; discusses verifying the identity of said application prior to providing said filtered application data.

As per claim 3:

See COL.17, lines 25-38; discusses sending at least one security token.

As per claim 4:

See COL.13, lines 46-67 and COL.15, lines 32-56discusses verifying the identity of a machine participating in said process prior to providing said filtered application data.

As per claim 5:

See COL.17, lines 25-38; discusses sending at least one security token.

As per claim 8:

Rothermel discloses method for filtered application-to-application communication of applications running on computing platforms including an operating system kernel, said method comprising:

providing a communication interface to an application; **[COL.11, lines 18-19 and lines 67]**

filtering application data received from a process of said application;
[COL.4, lines 45-46 and COL.11, lines 56-64]

sending an authentication request to an authentication service; **[COL.11, lines 35-44]**

receiving authentication information; and **[COL.13, lines 31-67]**

providing said filtered application data directly to communication hardware. **[COL.12, lines 14-67]**

As per claim 9:

See COL.13, lines 46-67 and COL.15, lines 32-56; discusses verifying the identity of said application prior to providing said filtered application data.

As per claim 10:

See COL.17, lines 25-38; discusses sending at least one security token.

As per claim 11:

See COL.13, lines 46-67 and COL.15, lines 32-56; discusses verifying the identity of a machine participating in said process prior to providing said

filtered application data.

As per claim 12:

See COL.17, lines 25-38; discusses sending at least one security token.

As per claim 15:

Rothermel discloses system for filtered application-to-application communication of applications running on computing platforms including an operating system kernel, said method comprising:

multi-channel communication hardware; and **[COL.3, lines 25-30]**

at least one application interface and filter operative to provide filtered data from an application process directly to said multi-channel communication hardware. **[COL.3, lines 32-56]**

As per claim 18:

Rothermel discloses system for filtered application-to-application communication of applications running on computing platforms including an operating system kernel, said method comprising:

multi-channel communication hardware; **[COL.3, lines 25-30]**

at least one application interface and filter operative to provide filtered data from an application process directly to said multi-channel communication hardware; and **[COL.3, lines 32-56]**

at least one authentication service adapted to determine whether said application process is genuine and/or whether at least one machine

Art Unit: 2135

participating in said application process is genuine. **[COL.11, lines 18-58 and COL.17, lines 25-58]**

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6-7, 13-14, 16-17, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothermel, et al. (US 6,678,827), and further in view of Bunton, et al. (US 6,690,757).

As per claim 6:

Rothermel discloses providing a communication interface to an application **[COL.11, lines 18-19 and lines 67]** and filtering application data received from a process of said application according to a predetermined policy

[COL.4, lines 45-46 and COL.11, lines 56-64]. However fails to discuss providing said filtered application data directly to a multi-channel network interface card.

Bunton, et al. discusses a method of moving the huge amounts of data used in today's business place to storage locations external to network computers and servers **[COL.2, lines 23-27]**. Bunton teaches a transition to external I/O solutions for this segregation between processors and data storage are the multi-channel network interface proposed by the Infiniband (SM) Trade Association **[COL.2, lines 50-67]**. The Infiniband is a switched network topology interconnect standard where the channels implement switched, point-to-point serial connections rather than shared, load and store architecture used in parallel bus PCI connections **[COL.2, lines 28-37]**. Therefore it would have been obvious to combine the teachings of Bunton on Infiniband with Rothermel because the switched topology that permits many more nodes that can be placed farther apart than a parallel bus, thus becomes more scalable **[COL.2, lines 40-46]**.

As per claim 7:

Rothermel discloses providing a communication interface to an application **[COL.11, lines 18-19 and lines 67]** and filtering application data received from a process of said application according to a predetermined policy **[COL.4, lines 45-46 and COL.11, lines 56-64]**. However fails to discuss

providing said filtered application data directly to a multi-channel network interface card.

Bunton, et al. discusses a method of moving the huge amounts of data used in today's business place to storage locations external to network computers and servers **[COL.2, lines 23-27]**. Bunton teaches a transition to external I/O solutions for this segregation between processors and data storage are the multi-channel network interface proposed by the Infiniband (SM) Trade Association **[COL.2, lines 50-67]**. The Infiniband is a switched network topology interconnect standard where the channels implement switched, point-to-point serial connections rather than shared, load and store architecture used in parallel bus PCI connections **[COL.2, lines 28-37]**. Therefore it would have been obvious to combine the teachings of Bunton on Infiniband with Rothermel because the switched topology that permits many more nodes that can be placed farther apart than a parallel bus, thus becomes more scalable **[COL.2, lines 40-46]**.

As per claim 13:

Rothermel discloses providing a communication interface to an application **[COL.11, lines 18-19 and lines 67]** and filtering application data received from a process of said application according to a predetermined policy **[COL.4, lines 45-46 and COL.11, lines 56-64]**. However fails to discuss providing said filtered application data directly to a multi-channel network interface card.

Bunton, et al. discusses a method of moving the huge amounts of data used in today's business place to storage locations external to network computers and servers **[COL.2, lines 23-27]**. Bunton teaches a transition to external I/O solutions for this segregation between processors and data storage are the multi-channel network interface proposed by the Infiniband (SM) Trade Association **[COL.2, lines 50-67]**. The Infiniband is a switched network topology interconnect standard where the channels implement switched, point-to-point serial connections rather than shared, load and store architecture used in parallel bus PCI connections **[COL.2, lines 28-37]**. Therefore it would have been obvious to combine the teachings of Bunton on Infiniband with Rothermel because the switched topology that permits many more nodes that can be placed farther apart than a parallel bus, thus becomes more scalable **[COL.2, lines 40-46]**.

As per claim 14:

Rothermel discloses providing a communication interface to an application **[COL.11, lines 18-19 and lines 67]** and filtering application data received from a process of said application according to a predetermined policy **[COL.4, lines 45-46 and COL.11, lines 56-64]**. However fails to discuss providing said filtered application data directly to a multi-channel network interface card.

Bunton, et al. discusses a method of moving the huge amounts of data used in today's business place to storage locations external to network

computers and servers **[COL.2, lines 23-27]**. Bunton teaches a transition to external I/O solutions for this segregation between processors and data storage is the multi-channel network interface proposed by the Infiniband (SM) Trade Association **[COL.2, lines 50-67]**. The Infiniband is a switched network topology interconnect standard where the channels implement switched, point-to-point serial connections rather than shared, load and store architecture used in parallel bus PCI connections **[COL.2, lines 28-37]**. Therefore it would have been obvious to combine the teachings of Bunton on Infiniband with Rothermel because the switched topology that permits many more nodes that can be placed farther apart than a parallel bus, thus becomes more scalable **[COL.2, lines 40-46]**.

As per claim 16:

Rothermel discloses providing a communication interface to an application **[COL.11, lines 18-19 and lines 67]** and filtering application data received from a process of said application according to a predetermined policy **[COL.4, lines 45-46 and COL.11, lines 56-64]**. However fails to discuss providing said filtered application data directly to a multi-channel network interface card.

Bunton, et al. discusses a method of moving the huge amounts of data used in today's business place to storage locations external to network computers and servers **[COL.2, lines 23-27]**. Bunton teaches a transition to external I/O solutions for this segregation between processors and data storage

is the multi-channel network interface proposed by the Infiniband (SM) Trade Association **[COL.2, lines 50-67]**. The Infiniband is a switched network topology interconnect standard where the channels implement switched, point-to-point serial connections rather than shared, load and store architecture used in parallel bus PCI connections **[COL.2, lines 28-37]**. Therefore it would have been obvious to combine the teachings of Bunton on Infiniband with Rothermel because the switched topology that permits many more nodes that can be placed farther apart than a parallel bus, thus becomes more scalable **[COL.2, lines 40-46]**.

As per claim 17:

Rothermel discloses providing a communication interface to an application **[COL.11, lines 18-19 and lines 67]** and filtering application data received from a process of said application according to a predetermined policy **[COL.4, lines 45-46 and COL.11, lines 56-64]**. However fails to discuss providing said filtered application data directly to a multi-channel network interface card.

Bunton, et al. discusses a method of moving the huge amounts of data used in today's business place to storage locations external to network computers and servers **[COL.2, lines 23-27]**. Bunton teaches a transition to external I/O solutions for this segregation between processors and data storage is the multi-channel network interface proposed by the Infiniband (SM) Trade Association **[COL.2, lines 50-67]**. The Infiniband is a switched network

topology interconnect standard where the channels implement switched, point-to-point serial connections rather than shared, load and store architecture used in parallel bus PCI connections **[COL.2, lines 28-37]**. Therefore it would have been obvious to combine the teachings of Bunton on Infiniband with Rothermel because the switched topology that permits many more nodes that can be placed farther apart than a parallel bus, thus becomes more scalable **[COL.2, lines 40-46]**.

As per claim 19:

Rothermel discloses providing a communication interface to an application **[COL.11, lines 18-19 and lines 67]** and filtering application data received from a process of said application according to a predetermined policy **[COL.4, lines 45-46 and COL.11, lines 56-64]**. However fails to discuss providing said filtered application data directly to a multi-channel network interface card.

Bunton, et al. discusses a method of moving the huge amounts of data used in today's business place to storage locations external to network computers and servers **[COL.2, lines 23-27]**. Bunton teaches a transition to external I/O solutions for this segregation between processors and data storage is the multi-channel network interface proposed by the Infiniband (SM) Trade Association **[COL.2, lines 50-67]**. The Infiniband is a switched network topology interconnect standard where the channels implement switched, point-

to-point serial connections rather than shared, load and store architecture used in parallel bus PCI connections **[COL.2, lines 28-37]**. Therefore it would have been obvious to combine the teachings of Bunton on Infiniband with Rothermel because the switched topology that permits many more nodes that can be placed farther apart than a parallel bus, thus becomes more scalable **[COL.2, lines 40-46]**.

As per claim 20:

Rothermel discloses providing a communication interface to an application **[COL.11, lines 18-19 and lines 67]** and filtering application data received from a process of said application according to a predetermined policy **[COL.4, lines 45-46 and COL.11, lines 56-64]**. However fails to discuss providing said filtered application data directly to a multi-channel network interface card.

Bunton, et al. discusses a method of moving the huge amounts of data used in today's business place to storage locations external to network computers and servers **[COL.2, lines 23-27]**. Bunton teaches a transition to external I/O solutions for this segregation between processors and data storage is the multi-channel network interface proposed by the Infiniband (SM) Trade Association **[COL.2, lines 50-67]**. The Infiniband is a switched network topology interconnect standard where the channels implement switched, point-

to-point serial connections rather than shared, load and store architecture used in parallel bus PCI connections **[COL.2, lines 28-37]**. Therefore it would have been obvious to combine the teachings of Bunton on Infiniband with Rothermel because the switched topology that permits many more nodes that can be placed farther apart than a parallel bus, thus becomes more scalable **[COL.2, lines 40-46]**.

Response to Arguments

6. Applicant's arguments filed June 21, 2005 have been fully considered but they are not persuasive.

Applicant submitted a supplemental amendment subsequent to our in person interview. The supplemental amendment includes limitations that were not supported in specification or are the limitations a clarification to the original claimed language. Thus, constitutes new subject matter being introduced and will not be considered for the rejection. The examiner have provided the rejection above which excludes the new limitations "the communication interface bypasses a substantial portion of the operating system kernel" and "by passing a substantial portion of the operating system kernel".

As per applicant's arguments previous to the supplemental amendment filed on June 21, 2005 are being responded herein.

The argument concerning the teaching of the prior art's, Rothermel, et al., versus applications invention is traversed because the examiner finds Rothermel teaching what is claimed and not based on how Rothermel's and applicant's specific server or system details. Based on the broad claim language "communication interface", "policy", and "communication hardware", Rothermel teach the elements of claims 1-5, 8-12, 15, and 18. The fact that Rothermel explains in more details or have additional features such as the type of communication interface, the particular (security) policies, and the particular communication device only narrows the scope and further limits his invention. Whereas, applicant's claimed invention is open to a broad scope and by that any prior art that has the teachings of any filtering method that comprises any type of communication interface, filtering application data according to any policy, and provides the data to any communication hardware would meet what is claimed.

Applicant merely claims filtering application data received according to the predetermined policy that involves a communication interface and providing the filtered application data to the communication hardware **[COL.4, line 47 – COL.11, line 7]**. The examiner is required to give the broadest reasonable interpretation of what is claimed. Thus, the arguments regarding

Rothermel's standalone hardware elements intended to protect standard servers versus the applicant's novel server is irrelevant to what is claimed.

Further, the claimed invention merely claims a communication interface where the examiner broadly interprets any interface use to communicate to an application. For references purpose only, the examiner points to the Microsoft Computer Dictionary, 5th Edition on page 279 citing the interface is: 1) the point at which a connection is made between two elements so that they can work with each other or exchange information; 2) software that enables a program to work with the user (user interface or graphical user interface) with another program such as the operating system or with the computer's hardware.

As for "policy", claim language does not specify what kind of policy or the utility of the policy. Hence, Rothermel has met what is claimed because the application data is filtered according to some kind of policy **[COL.4, lines 35-46]**. So the policy involving security or not is simply not persuasive according to the claim language.

Rothermel does teach transmitting information between NSDs the supervisor devices and manager devices from unauthorized access and the internal devices are in direct communication with external devices **[COL.5, line 52 – COL.6, line 32]**. Thus, Rothermel disclosing the (hardware) devices that involves security does not mean Rothermel fails to disclose communication hardware.

Conclusion

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

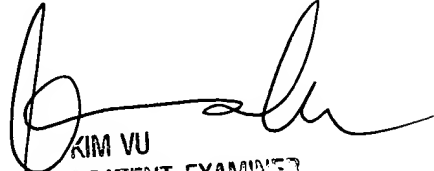
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEYNNA T. HA whose telephone number is (571) 272-3851. The examiner can normally be reached on Monday - Thursday (7:00 - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LHa


KIM VU
SUPERVISOR, PATENT EXAMINER
TECHNOLOGY CENTER 2135